

Coal and Ash Handling Plant

CHAPTER I Coal Handling

The question of the economical handling of coal for industrial purposes is undoubtedly of great importance and may be considered from two main points of view; first, the efficient handling and transporting from the colliery to the point at which it is delivered to the consumer; and second, the method to be employed by the fuel user for taking delivery of the coal and either storing it or distributing it to his various fuel-utilizing plants, such as boilers, retorts, gas producers, and other furnaces.

It is not proposed to deal with the question of handling the fuel between the colliery and the point where it is delivered to the consumer, as this subject is outside the scope of the present article, and therefore the object in what follows is to place before the reader a description of some of the various methods and types of apparatus which are used for handling coal economically after it has been delivered to the consumer by road, rail, or water.

In connection with electric power plant, where the size of the generating stations is continually being increased owing to the rapid development of power requirements, there is a field in which the question of coal handling is of paramount importance, as the cost of generation of electrical energy depends largely on low power-station costs, which in the absence of efficient and reliable coal handling plant are impossible.

The following deals chiefly with plant for use in power stations as

described above, and in which it will be appreciated that, as continuity of supply is the first consideration, it is essential to install plant which is not only efficient and economical but which shall be immune from periodical breakdowns and involuntary stoppages. In this connection, therefore, it is unwise to cut down prices and purchase inferior plant, as the losses sustained by stoppage and breakdowns rapidly absorb any saving in initial cost.